

LISTING OF CLAIMS

1. (Currently Amended) A backup power supply for supplying electric power to fan rotor circuitry that controller for controlling the rotation of a fan rotor having a fan blade, rotation of the rotor being controlled by rotor circuitry, the backup power supply fan controller comprising:
an input for receiving an input voltage, the input being coupled to the rotor circuitry, the rotor circuitry being energizable by the input voltage;
~~capacitive storage in electrical communication with both the rotor circuitry and the input, the capacitive storage capable of charging by receiving current from the input; and~~
a charge-current limited energy storage circuit coupled to the input and comprising a current limiting element coupled in series with between the input and the capacitive storage, the current limiting element at least in part controlling an amount of current flow from the input to the capacitive storage, the series combination of the current limiting element and the capacitive storage being coupled in parallel with the rotor circuitry.
2. (Currently Amended) The backup power supply fan controller as defined by claim 1 wherein the current limiting element is configured to control current flow from the input to the capacitive storage at least in part as a function of the amount of current required to be drawn by the rotor circuitry.
3. (Currently Amended) The backup power supply fan controller as defined by claim 1 wherein the current limiting element is a PTC.
4. (Currently Amended) The backup power supply fan controller as defined by claim 1 wherein the current limiting element is an adjustable linear voltage/current regulator.
5. (Currently Amended) The backup power supply fan controller as defined by claim 1 wherein the capacitive storage includes a plurality of series capacitors.

6. (Currently Amended) The backup power supply fan controller as defined by claim 1 wherein the current limiting element is configured to ensure that the rotor circuitry has sufficient current to rotate the rotor when the storage element is charging-storing power.

7. (Currently Amended) A backup power supply for supplying electric power to fan rotor circuitry that controller for controlling the rotation of a fan rotor having a fan blade, rotation of the rotor being controlled by rotor circuitry, the backup power supply fan controller comprising:
an input means for receiving an input voltage, the input means being coupled to the rotor circuitry, the rotor circuitry being energizable by the input voltage;
capacitive means for storing charge, the capacitive means being in electrical communication with both the rotor circuitry and the input, the capacitive means capable of storing charge by receiving current from the input; and
energy storage means coupled to the input means and comprising means for storing charge as a result of receiving current from the input means, coupled in series with control means for at least in part controlling an amount of current flow from the input means to the capacitive storage means, the energy storage control means being coupled in parallel with the rotor circuitry series between the input and the capacitive means.

8. (Currently Amended) The backup power supply fan controller as defined by claim 7 wherein the controlling means includes means for controlling current flow from the input means to the capacitive storage means at least in part as a function of the amount of current required to be drawn by the rotor circuitry.

9. (Currently Amended) The backup power supply fan controller as defined by claim 7 wherein the controlling means is a PTC.

10. (Currently Amended) The backup power supply fan controller as defined by claim 7 wherein the controlling means comprises is an adjustable linear voltage/current regulator.

11. (Currently Amended) The backup power supply fan controller as defined by claim 7 wherein the storing capacitive means includes a plurality of series capacitors.

12. (Currently Amended) The backup power supply fan controller as defined by claim 7 wherein the controlling means includes means for ensuring that the rotor circuitry has sufficient current to rotate the rotor when the storing element means is storing power charging.

13. (Currently Amended) A circuit for controlling the rotation of a rotor, the rotor having associated rotor control circuitry for rotating the rotor, the circuit comprising:

an input,

the rotor control circuitry capable of rotating the rotor in response to receipt of current drawn from the input;

~~a storage element capable of storing charge by drawing current from the input;~~

a charge-current limited energy storage circuit coupled to the input and comprising a current limiting element coupled in series with a between the input and storage element capable of storing charge by drawing current from the input, the current limiting element being configured to control an amount of current drawn by the storage element at least in part as a function of the current required to be drawn by the rotor control circuitry, the series combination of the current limiting element and the storage element being coupled in parallel with the rotor circuitry.

14. (Currently Amended) The circuit as defined by claim 13 wherein the current limiting element is configured to ensure that the rotor circuitry receives enough current to rotate the rotor when the storage element is storing power charging.

15. (Original) The circuit as defined by claim 13 wherein the current limiting element is configured to ensure that the motor begins operating substantially immediately after start-up.

16. (Original) The circuit as defined by claim 15 wherein the current limiting element is configured to ensure that the motor begins operating within one second after start-up.

17. (Original) The circuit as defined by claim 13 wherein the current limiting element is one of a PTC and a constant current device.

18. (Original) The circuit as defined by claim 13 wherein the storage element includes a plurality of series capacitors.
19. (Original) The circuit as defined by claim 13 wherein the storage element is in electrical communication with both the input and the rotor control circuitry.
20. (Original) The circuit as defined by claim 13 wherein the current limiting element is not coupled between the input and the rotor control circuitry.
21. (Original) The circuit as defined by claim 13 wherein the current limiting element isolates the rotor control circuitry from the storage element.
22. (Currently Amended) The backup power supply as defined by claim 1, wherein the current limiting element is not connected in series between the input and the rotor circuitry.
23. (Currently Amended) The backup power supply defined by claim 7, wherein the controlling means is not coupled in series between the input means and the rotor circuitry.
24. (Previously presented) The circuit defined by claim 13, wherein the current limiting element is not connected in series between the input and the rotor control circuitry.
25. (New) The backup power supply as defined by claim 1, wherein the capacitive storage comprises a capacitor having a value of at least one farad.
26. (New) The backup power supply as defined by claim 7, wherein the storing means comprises a capacitor having a value of at least one farad.
27. (New) The backup power supply as defined by claim 13, wherein the storage element comprises a capacitor having a value of at least one farad.